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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,012	06/15/2006	Veronique Hall-Goulle	TM/4-22999/A/PCT	6112

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EXAMINER

BLAND, LAYLA D

ART UNIT	PAPER NUMBER
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1623

MAIL DATE	DELIVERY MODE
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10/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,012	Applicant(s) HALL-GOULLE ET AL.	
	Examiner LAYLA BLAND	Art Unit 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 11-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,10 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is a response to Applicant's amendment submitted July 10, 2008, wherein claims 1, 2, 7, 10, and 16 are amended and claims 6 and 8 are canceled. Claims 1-5, 7, and 9-16 are pending. Claims 9 and 11-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on January 22, 2008. Claims 1-5, 7, 10, and 16 are examined on the merits herein.

In view of the cancellation of claims 6 and 8, all rejections made with respect to those claims in the previous office action are withdrawn.

In view of Applicant's amendment submitted July 10, 2008, the objection to claim 10 for informalities is withdrawn.

In view of Applicant's amendment submitted July 10, 2008, the rejection of claims 1-6, 8, 10, and 16 under 35 USC 112, first paragraph, for lacking enablement for compounds comprising any heterocyclic moiety and further comprising any substitutions is withdrawn.

In view of Applicant's amendment submitted July 10, 2008, the rejection of claims 1-6, 8, 10, and 16 under 35 USC 112, second paragraph, for being indefinite with regard to "substituted or unsubstituted," "reactive radical...of the heterocyclic series," definitions for variables which were not given in the alternative, and "non-reactive substituent" is withdrawn.

The following rejections are maintained:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 contains a moiety (3c') which is ambiguous as to the substituent attached to nitrogen. The substituent attached to nitrogen is drawn as "H, Me, Et." Only one substituent may be attached to the same position in a structure drawing and commas should not be present in a chemical structure. The substituent(s) should be clearly defined.

Response to Arguments

Applicant argues that claim 7 would be understood by those skilled in the art. If a position in a chemical structure is variable, a variable should be used and defined within the claim, as was done for the other variables in the chemical structures, such as Q₁, Q₁, Z₁, etc.

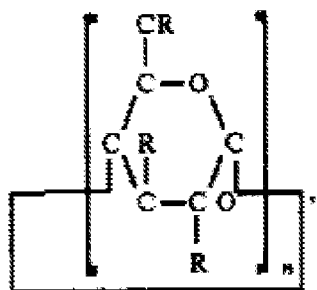
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

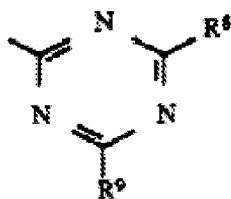
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7, 10, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuscher et al. (US 5,728,823, March 17, 1998, PTO-1449 submitted September 11, 2006).

Reuscher et al. teach reactive cyclodextrin derivatives having nitrogen-containing heterocycles [see abstract]. The cyclodextrin derivatives are of formula I, shown below:



Wherein R is OH, OR¹, or R². In a preferred embodiment, R² is -R³_m-(CHR⁴)-R⁵-R⁶, where R³ and R⁵ can be NH or N-alkyl, and R⁶ is the heterocycle shown below:

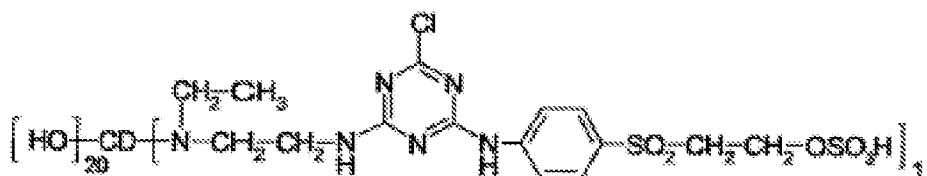


R⁸ and R⁹, shown on the above heterocycle, can be halogen, hydroxyl, alkoxy, NR² or N-phenyl, wherein the phenyl can be substituted with groups such as Cl, SO₂CH₂CH₂OSO₃H and CH₂SO₂CH₂CH₂OSO₃H. [columns 1-3]

The compounds are useful for finishing textiles [column 13, line 23 - column 15, line 26].

Reuscher et al. do not exemplify the species elected in the instant application, although the species does fall within the genus taught by Reuscher et al.

It would have been obvious to one of ordinary skill in the art to prepare the following compound, which is the elected species in this application:



Although Reuscher et al. do not exemplify this particular species, the species is taught as part of a genus of compounds which are useful for textile finishing, which is the same utility disclosed in the instant invention. Thus, the skilled artisan could have prepared this species and could have predicted that it would have utility in the textile industry.

It is noted that, although the elected species is not encompassed by all the rejected claims, the rejection over Reuscher et al. was deemed to be appropriate to those claims as well because the instantly claimed genus has substantial overlap and common utility with the genus of Reuscher et al. The major difference seen between the two genera is that the instant genus requires that the reaction group be linked to the cyclodextrin via a nitrogen, while the genus of Reuscher et al. teaches O, S, N, or OC=O in that position. This is a small number of identified, predictable variables and one of ordinary skill in the art could have prepared compounds with these variables and

reasonably expected to achieve products which would be useful in the textile industry.

Thus, the claims are obvious over Reuscher et al.

Response to Arguments

Applicant argues that Reuscher fails to provide any motivation to the skilled artisan to employ amino-derivatized polysaccharides. As was discussed above, Reuscher teaches linkage of the reactive group to cyclodextrin via an ether, thioether, ester or amine bond. A compound wherein the reactive group is linked via an amine bond is an amino-derivatized polysaccharide. Reuscher also states that “using the process according to this invention, cyclodextrin derivatives having stable C-O, C-S or C-N bonds can be obtained” [column 4, lines 47-49]. This is a small number of identified, predictable variables and one of ordinary skill in the art could have prepared compounds with any of these four variables, including amino, and reasonably expected to achieve products which would be useful in the textile industry.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAYLA BLAND whose telephone number is (571)272-9572. The examiner can normally be reached on Tuesday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anna Jiang can be reached on (571) 272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shaojia Anna Jiang, Ph.D./
Supervisory Patent Examiner, Art Unit 1623

/Layla Bland/
Examiner, Art Unit 1623